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ABSTRACT

During spring and fall 1985, a study was conducted at Cosumnes River College (CRC) to determine how assessment testing scores related to student persistence and performance. The student history files of a random sample of 498 students who had been tested by the CRC Assessment Center during spring and fall 1985 were examined, yielding the following results: (1) females scored significantly higher in the test areas of spelling and grammar conventions; (2) whites tested higher than any other ethnic group in every area except spelling; (3) blacks had consistently low scores on all sections of the English test; (4) reading comprehension scores and reference skills decreased with age; (5) differences between day and evening students were quite small; (6) students with transfer goals scored substantially higher in all areas of testing than nontransfer students; (7) results for older, longer removed from high school students indicated some deterioration in English skills, suggesting the need for re-entry support services and tutorial and remedial programs; and (8) English skills appeared to be critical to the successful completion of college-level course work. (LAL)

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Assessment Testing:
Analysis and Predictions
Spring-Fall 1985

Prepared by:
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Thank you.

College Office of Research
July 1986

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PREFACE

The primary purpose of assessment testing is to provide informed guidance in course placement for incoming students. Course placement is based solely on test scores which have been determined by the instructional area to be appropriate for entry level participation. The criteria for course placement is similar to that in use at other Los Rios colleges. Although no formal evaluation has been done, an informal evaluation has led to a generally accepted conclusion that the assessment/placement procedures have contributed to an improvement in retention at Cosumnes River College (CRC).

INTRODUCTION

The purpose of this research report is to present an analyses of sample data collected on a routine basis by the assessment center. The intent is to show how the assessment testing scores relate to student persistence and performance.

No attempt has been made to provide a thorough validation of the assessment program. However, this research paper does reveal insights as to which factors are important for college performance and which assessment subscores have predictive capabilities for these performance factors. The assessment process provides data which can be used to derive information on the differential performance of the feeder high schools, various ethnic groups, and age and sex differences. This report also provides comparisons between day and evening students and transfer versus non-transfer students. Information is included on recent high school graduates compared to those who have been out of high school for four or more years.

METHODS

A sample of students tested by the CRC Assessment Center during spring and fall 1985 was used for this study. A random sample of 498 students was drawn from the total population. Student History files were pulled from the Admissions and Records Office for the 498 sample students. Test scores consisted of both reading and English scores with subscores in vocabulary and comprehension for reading and spelling, reference skills, and grammar conventions for the English component. All scores are from the Stanford Test of Academic Skills (TASK). The TASK test is a comprehensive achievement test intended to measure the skills and competencies that are requisite for college academic training. In addition, the student's reading grade level, reading placement, English grade level, and English placement were recorded.

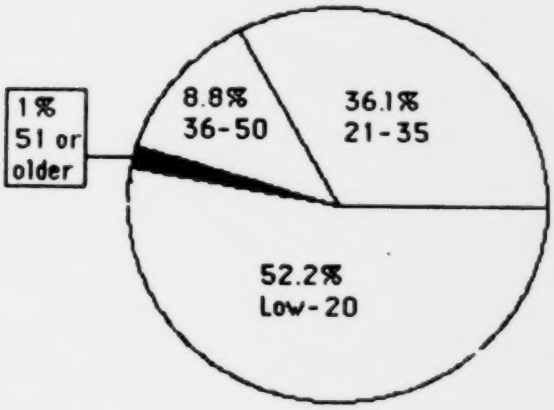
Information was also taken from the assessment test form which the students fill out prior to taking the TASK test. These items included: age, sex, ethnicity, high school, length of time since high school graduation, goals for attending college (transfer/non-transfer), and projected or current time of attendance (day/evening). The student's history file provided information on the number of semesters in school, units attempted and units completed, and completion of graduation requirements.

The College Office of Research (COR) used the software, the Statistical Package for the Social Sciences (SPSS PC+) and an IBM AT to do the statistical calculations.

RESULTS: Description of the Sample

The SPSS FREQUENCIES program was used to develop a profile of the sample. Age information was aggregated into 4 groups: Low to 20, 21-35, 36-50, and 51 or higher. Figure 1 presents the age breakdown of the students indicating over half of the students tested are below age 21.

FIGURE 1 - AGE PROFILE OF SAMPLE



The ethnic composition of the sample reveals that ethnic minorities were adequately sampled as compared to the population statistics reported in the Student Characteristics Report for 1985. As Table 1 reveals, only whites were under-represented.

TABLE 1 - ETHNICITY OF SAMPLE

Ethnicity	Frequency	& of Sample	% of CRC Population
American Indian	13	2.6	1.9
Asian	38	7.6	6.2
Black	96	19.3	13.2
White	268	53.8	64.0
Hispanic	42	8.4	8.0
Filipino	16	3.2	2.4
Other	4	.8	2.4

21 missing cases (4.2%)

Other characteristics are also comparable with The Student Characteristics report for 1985. The sexual composition of the sample is 42.5% male and 57.5% female, 2 percentage points off from the total CRC population. Non-transfer goals are indicated by 188 students (42.2%) and transfer goals by 260 (58.0%). The majority of the students indicated day attendance (67%) with 16.5% in the evening and another 16.5% attending during both day and evening hours.

Figure 2 presents the distribution of the sample on the length of time since high school graduation.

FIGURE 2 - PROFILE OF LENGTH OF TIME SINCE HIGH SCHOOL GRADUATION

More than 35% of the sample had been out of high school for 4 or more years and 48% were recent graduates.

Since no statistics are available on the total population tested by the assessment center during the spring and fall of 1985, it is assumed an adequate sample was drawn. The sample is clearly comparable on key characteristics with the total student population at CRC during the same period of time (Spring/Fall 1985).

RESULTS: Mean Test Scores

The differential test performance of the various demographic groups was assessed using the SPSS MEAN program. The information developed by this analysis shows a picture of the mean percentile test scores for all identified subgroups in the sample tested. Included also is an analyses of variance to determine any significant differences among the groups.

Tables 2 through 7 present the mean percentile test scores and analysis of variance information. The male/female differences were restricted to the two test areas of spelling and conventions in which females scored significantly higher (see Table 1). This occurrence of higher scores by females also resulted in a significant difference in English grade levels.

All mean test scores proved to be significantly different for the ethnic subgroups (see Table 3). The white ethnic majority tested higher in every area except spelling in which the 16 Filipino students edged slightly ahead. That data shows that some ethnic minorities had difficulty with the reading portion of the TASK test. The Asian, Black, and Filipino groups have low scores in reading vocabulary. The Asians and Filipinos, however, had a markedly higher comprehension mean test score while Blacks remained quite low. The difference in the Asian and Filipino scores may be the result of problems related to English as a Second Language (ESL).

The English portion of the TASK test revealed several interesting patterns. First, the Black subgroup was consistently low in all sections of the English testing and had difficulty with grammar conventions. These grammar difficulties are also reflected in the low English grade level (8.36) which is almost a full grade level lower than any other ethnic subgroup. Secondly, the Filipino group had difficulty with both reference skills and grammar conventions and their mean English grade level was 9.26. The pattern for all other groups showed a drop in test scores for the grammar conventions portion of the testing.

The display of test scores by age is found in Table 4. Only three areas are significantly different among the age groups: reading comprehension, reference skills, and total English score. The pattern of change over age is graphed on Figure 3 revealing an interesting pattern. Reading comprehension scores decrease with age, as do reference skills. The pattern for the total English score is also similar with the exception of a slight upward trend after age 50 which may be the result of such a small sample (5 students) in this category. Older returning students may need to "brush up" on these skills before taking other college courses.

The pattern of differences between day and evening students is quite small with only two significant areas: vocabulary and spelling (see Table 5). In both of these cases, evening students scored substantially higher.

The transfer/non-transfer comparisons proved to be quite strong with all test scores significantly different (see Table 6). In all areas of testing, students with transfer goals scored substantially higher.

TABLE 2 - MEAN TEST SCORES BY SEX

SEX	# OF STUDENTS	VOC	COMP	TOTAL READ	SPELL	REF	CONV	TOTAL ENG	READ GRADE	ENG GRADE
Male	211	72.16	72.81	72.49	61.86	64.88	58.53	61.09	10.38	9.63
Female	286	72.79	73.63	73.27	68.37	65.95	64.29	64.71	10.69	10.20
Entire Population	497*	72.50	73.29	72.93	65.59	65.43	61.86	63.15	10.55	9.96

* 1 missing case

TEST	F-VALUE**	SIGNIFICANCE** LEVEL
Vocabulary	.17	.8400
Comprehension	.11	.9000
Total Reading	.13	.8822
Spelling	6.27*	.0021*
Reference Skills	1.26	.2846
Conventions	4.90*	.0078*
Total English	2.50	.0830
Reading Grade	.56	.5693
English Grade	3.51*	.0307*

*Significance Level 7.05

**NOTE - F-Value is the statistical calculation to test the hypothesis that two or more population variances are equal. A significant F statistic indicates that population means are probably unequal but does not show where differences occur.

- Significance Level, a smaller observed significance level means little probability that two population means are equal, indications would be that there is a meaningful observable difference among the groups compared.

TABLE 3 - MEAN TEST SCORES BY ETHNICITY

ETHNICITY	# OF STUDENTS	VOC	COMP	TOTAL READ	SPELL	REF	CONV	TOTAL ENG	READ GRADE	ENG GRADE
American Indian	13	72.57	69.69	70.92	63.46	57.68	61.52	59.84	10.00	9.77
Asian	38	56.26	67.16	62.52	66.72	62.30	57.52	59.60	10.74	9.82
Black	96	59.97	59.92	59.76	56.05	52.00	48.12	48.42	8.71	8.36
White	268	80.10	80.94	80.60	69.43	72.73	68.91	70.35	11.47	10.68
Hispanic	42	71.77	70.00	70.76	63.33	63.50	57.59	61.45	10.07	9.76
Filipino	16	55.24	62.00	59.13	70.94	51.03	51.48	54.28	8.19	9.25
Other	4	85.83	81.50	83.35	68.75	66.65	65.50	64.80	12.00	10.25
Entire Population	477*	72.42	73.71	73.14	65.87	65.77	62.11	63.42	10.59	9.99

* 21 missing cases

TEST	F-VALUE	SIGNIFICANCE LEVEL
Vocabulary	22.55	0.0 *
Comprehension	20.73	0.0 *
Total Reading	24.96	0.0 *
Spelling	5.56	.0000*
Reference Skills	15.35	0.0 *
Conventions	17.01	0.0 *
Total English	21.51	0.0 *
Reading Grade	10.19	0.0 *
English Grade	10.47	0.0 *

* Significance Level 7.05

TABLE 4 - MEAN TEST SCORES BY AGE

AGE	# OF STUDENTS	VOC	COMP	TOTAL READ	SPELL	REF	CONV	TOTAL ENG	READ GRADE	ENG GRADE
Low to 20	260	71.13	75.70	73.70	66.79	69.01	63.91	65.25	10.67	10.18
21 - 35	180	73.91	72.67	73.23	64.81	63.80	61.24	62.38	10.58	9.87
36 - 50	44	77.33	67.91	71.92	64.38	55.30	56.01	57.19	10.16	9.30
51 or Older	5	81.62	62.00	70.34	68.50	53.32	67.60	61.12	10.80	9.80
Entire Population	489*	72.82	73.74	73.33	65.86	65.69	62.25	63.42	10.59	9.98

* 9 missing cases

TEST	F-VALUE	SIGNIFICANCE LEVEL
Vocabulary	1.77	.1513
Comprehension	3.13	.0253*
Total Reading	.16	.9202
Spelling	.44	.7265
Reference Skills	6.75	.0002*
Conventions	2.32	.0750
Total English	2.64	.0484*
Reading Grade	.28	.8423
English Grade	1.58	.1943

* Significance Level 7.05

FIGURE 3 - SIGNIFICANT MEAN TEST SCORES BY AGE

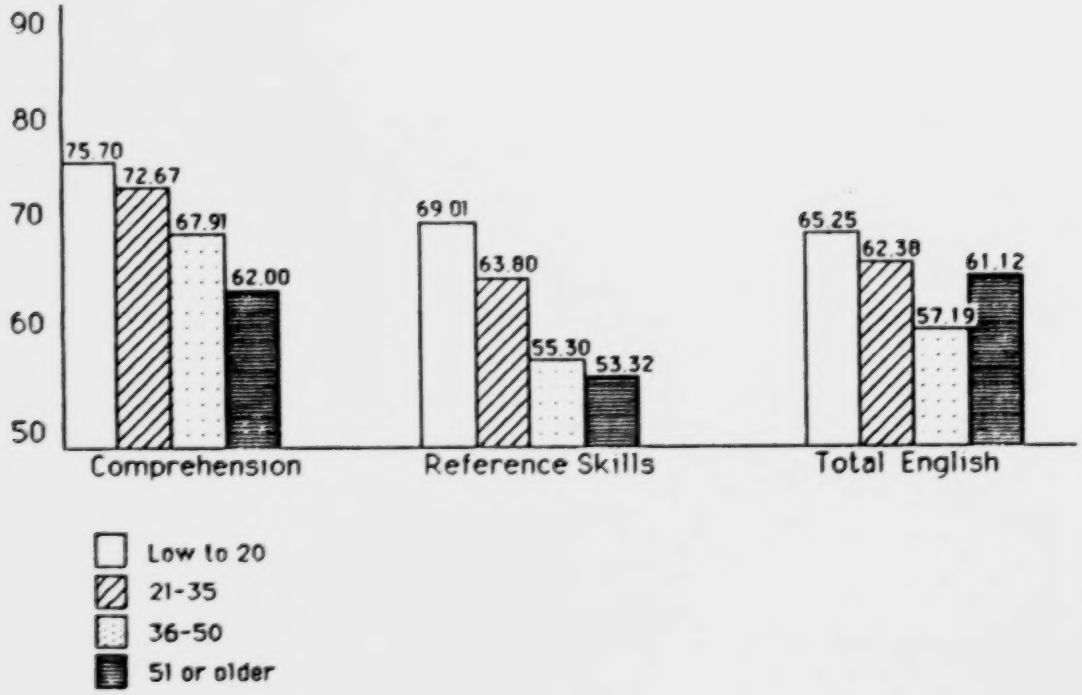


TABLE 5 - MEAN TEST SCORES BY DAY/EVENING ATTENDANCE

TIME OF ATTENDANCE	# OF STUDENTS	VOC	COMP	TOTAL READ	SPELL	REF	CONV	TOTAL ENG	READ GRADE	ENG GRADE
Day	318	71.49	73.92	72.90	65.13	66.45	62.23	63.64	10.56	9.90
Evening	78	80.37	75.24	77.42	71.67	64.43	65.14	64.96	10.94	10.40
Both	78	73.74	74.74	74.15	66.84	67.48	61.46	63.92	10.74	10.18
Entire Population	474*	73.32	74.28	73.85	66.48	66.23	62.59	63.90	10.65	10.03

* 24 missing cases

TEST	F-VALUE	SIGNIFICANCE LEVEL
Vocabulary	6.23	.0021*
Comprehension	.19	.8295
Total Reading	2.03	.1328
Spelling	3.33	.0363*
Reference Skills	.44	.6417
Conventions	.84	.4342
Total English	.16	.8537
Reading Grade	.41	.6668
English Grade	1.24	.2911

* Significance Level 7.05

TABLE 6 - MEAN TEST SCORES BY TRANSFER GOALS

GOAL	# OF STUDENTS	VOC	COMP	TOTAL READ	SPELL	REF	CONV	TOTAL ENG	READ GRADE	ENG GRADE
Non-Transfer	188	71.10	70.78	70.90	62.54	61.69	60.00	60.52	10.18	9.56
Transfer	260	75.29	77.30	76.42	69.08	70.08	64.88	66.70	11.06	10.39
Entire Population	448*	73.53	74.57	74.11	66.34	66.57	62.82	64.10	10.69	10.04

* 50 missing cases

TEST	F-VALUE	SIGNIFICANCE LEVEL
Vocabulary	4.61	.0323*
Comprehension	13.85	.0002*
Total Reading	10.44	.0013*
Spelling	11.54	.0007*
Reference Skills	17.69	.0000*
Conventions	6.90	.0089*
Total English	12.47	.0005*
Reading Grade	6.96	.0086*
English Grade	11.01	.0010*

* Significance Level 7.05

Comparisons of subgroups based on length of time since high school graduation produced five significant differences in test scores (see Table 7). There are two identifiable patterns. The first is reading vocabulary which increased slightly over the years. The second is found in the English portion of the test including spelling, reference skills, grammar conventions, and total English scores. Figure 4 graphically demonstrates that all sub scores of the English area initially decrease from the level of recent graduation and then increase after 4 or more years though never quite reaching the initial recent graduation level. These patterns may be related to usage of these skills on the job and in daily living. It would be reasonable to assume that vocabularly skills are being developed through use in daily conversation, whereas writing and English skills may not necessarily be similarly developed. Such patterns demonstrate the need for college level English writing courses.

TABLE 7 - MEAN TEST SCORES BY LENGTH OF TIME SINCE GRADUATION FROM HIGH SCHOOL

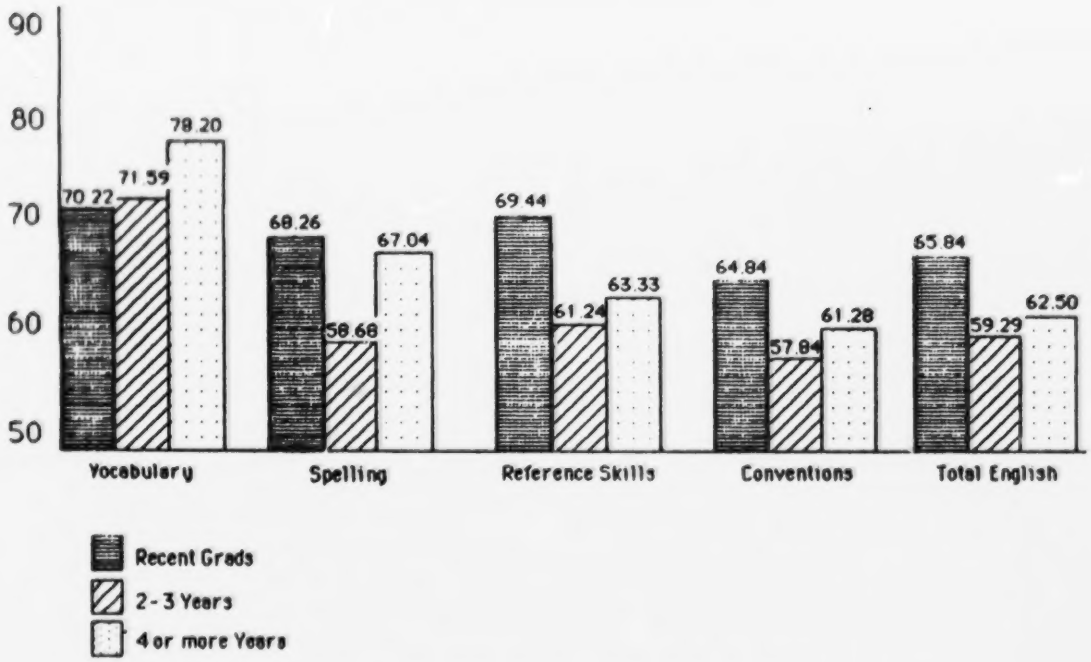
LENGTH OF TIME	# OF STUDENTS	VOC	COMP	TOTAL READ	SPELL	REF	CONV	TOTAL ENG	READ GRADE	ENG GRADE
Recent Graduate	221	70.22	75.72	73.32	68.26	69.44	64.84	65.84	10.76	10.32
2 - 3 years	76	71.59	70.43	70.94	58.68	61.24	57.84	59.29	10.07	9.16
4 or more years	162	78.20	72.91	75.19	67.04	63.33	61.28	62.50	10.28	10.02
Entire Population	459*	73.27	73.86	73.58	66.24	65.93	62.38	63.57	10.65	10.02

* 39 missing cases

TEST	F-VALUE	SIGNIFICANCE LEVEL
Vocabulary	7.45	.0007*
Comprehension	2.48	.0851
Total Reading	1.42	.2431
Spelling	6.43	.0018*
Reference Skills	6.07	.0025*
Conventions	4.12	.0169*
Total English	3.92	.0206*
Reading Grade	1.27	.2805
English Grade	5.57	.0041*

* Significance Level 7.05

FIGURE 4 - SIGNIFICANT MEAN TEST SCORES BY LENGTH OF TIME SINCE GRADUATION FROM HIGH SCHOOL



RESULTS: Correlations

Because the interval variables of age, sex, ethnic origin, length of time, transfer goals, and time of attendance were associated with several test scores, Pearson Correlations were run to investigate the relationship between test scores and demographic variables. Table 8 contains these figures indicating which are significant. A two-tailed test of significance was used since no directionality was assumed. Although a number of correlations are significant, none represent a large portion of explained variance. For example, the largest single correlation is between the total English score and grade point average ($r=.2548$). To obtain a measure of the amount of variance in the GPA which is related to the English score, the correlation is squared ($r^2=.0649$). This can be interpreted as 6.5% explained variance. Thus, none of the obtained correlations have great explanatory strength. Of the performance values, only GPA was correlated with all test scores at the .001 level of significance. Units completed and number of semesters in school may not be correlated since many of the students tested by the assessment center are recently enrolled at CRC and it has not been a long enough time to follow the predictive or correlational strength for these measures.

TABLE 8 - CORRELATIONS

	VOC	COMP	TOTAL READ	SPELL	REF	CONV	TOTAL ENG
Age	.1771**	-.0979	.0318	-.0005	-.1709**	-.0393	-.0819
Sex	.0357	.0561	.0518	.1449*	.0604	.1592*	.0911
Ethnicity	.1761**	.1396*	.1705**	.0874	.1073	.0984	.1092
Length of Time Since HS Grad.	.2289**	-.0617	.0792	-.0089	-.1222	-.0536	-.0797
Transfer Goals	.0947	.1808**	.1520*	.1637*	.2019**	.1058	.1746**
Time of Attendance	.0270	-.0273	-.0068	.0314	-.0438	-.0688	-.0584

	VOC	COMP	TOTAL READ	SPELL	REF	CONV	TOTAL ENG
GPA	.1769**	.1993**	.2061**	.2384**	.2506**	.2542**	.2548**
Number of Semesters in School	.0838	-.0118	.0334	.0579	-.0151	.0604	.0173
Units Completed	.0383	.0646	.0549	.0514	.0366	.0873	.0460

N of cases = 388

2 - Tailed Significance - * -.01
** -.001

To further investigate the predictive power of the assessment testing multiple regression analyses were done for the three performance variables of GPA, units completed, and number of semesters in school. The SPSS Regression program was used with a stepwise method of entering and removing variables. This procedure sequentially enters independent variables into the regression equation. At each step, variables are examined for removal and new variables are examined for entry. Variable selection is terminated when no more variables meet entry or exit criteria. The independent variables used were each of the assessment test scores. Table 9 presents the results of these analyses. For units completed only grammar conventions provides some predictive ability. Although the T value is significant, the percentage of variance explained is quite low (r^2=1.2%). For the number of semesters in school, vocabulary and total reading score provide some predictive ability although this is again weak (r^2=3.0%). The third regression uses GPA as a dependent measure of success in school. Two variables, grammar conventions and reference skills provide significant predictive power (r^2=9.0%). These regressions indicate some initial patterns which should be followed up over a long time span to see if the patterns remain consistent and if they increase in strength.

TABLE 9 - REGRESSION RESULTS FOR PERFORMANCE VALUES

Dependent Variable = Units Completed

VARIABLES	B	SE B	BETA	T	SIG T
Conventions	.08968	.03647	.11061	2.459	.0143
(Constant)	10.13880	2.38110		4.258	.0000

Dependent Variable = Number of Semesters in School

VARIABLES	B	SE B	BETA	T	SIG T
Vocabulary	.04443	.01235	.39790	3.596	.0004
Total Reading	- .03750	.01392	-.29806	-2.694	.0073
(Constant)	1.98856	.42728		4.654	.0000

Dependent Variable = GPA

VARIABLES	B	SEB	BETA	T	SIG T
Conventions	.C0939	.00254	.20950	3.692	.0002
Reference Skills	.00495	.00238	.11785	2.077	.0383
(Constant)	1.07042	.13783		7.766	.0000

RESULTS: High School Patterns

The final section of results is a comparison of the mean test scores for the primary feeder high schools. Table 10 is an alphabetical listing of all high schools with a sample representation of 5 or more students and a grouping of other Sacramento area schools, Los Angeles, out of state, and foreign country high schools. The major feeder high schools in the sample are Burbank, Cordova, Elk Grove, Johnson, Kennedy, McClatchy, Sacramento, and Valley High Schools. Table 11 shows the rank ordering of the nineteen (19) high schools in terms of total reading and total English scores.

Burbank High School students scored especially low in reading vocabulary (63.0) and the spelling (58.4) and grammar conventions (56.3) of the English test. Sacramento High students are also low in reading vocabulary (58.3) and grammar conventions (55.1) but are also low in reference skills (56.6). Kennedy High students scored well in most areas and are the highest ranking in spelling but scored low in grammar conventions (59.0). Elk Grove High scored consistently well in all portions of the testing. The 30 out of state high school graduates scored higher than the local high schools in reading vocabulary but fall between 6th and 7th rank in total reading and English scores.

TABLE 10 - MEAN TEST SCORES FOR HIGH SCHOOLS

	# OF STUDENTS	VOC	COMP	TOTAL READ	SPELL	REF	CONV	TOTAL ENG	READ GRADE	ENG GRADE
American Legion	5	72.4	73.2	72.9	67.0	70.0	53.3	57.4	10.2	9.8
Argonaut	8	70.2	71.8	71.3	64.4	59.4	58.3	62.5	9.5	9.8
Burbank	32	63.0	64.9	64.1	58.4	63.6	56.3	57.3	9.2	9.2
Christian Brothers	5	82.2	90.0	86.7	73.0	83.3	76.2	80.4	12.6	12.4
Cordova	11	69.3	78.5	74.6	63.4	76.0	63.2	65.8	10.4	10.1
Daylor	5	78.3	70.4	73.8	61.5	56.7	60.0	59.6	10.0	9.6
Elk Grove	71	76.8	79.5	78.4	68.7	72.1	67.7	69.6	11.1	10.8
Galt	6	77.5	84.3	81.4	61.7	69.5	69.9	68.2	11.5	9.7
Johnson	24	65.7	69.4	67.7	63.3	60.0	60.0	59.4	10.0	9.3
Kennedy	25	77.4	75.2	76.1	73.6	70.3	59.0	65.6	11.1	10.8
McClatchy	12	75.4	78.7	77.3	76.0	68.1	65.5	66.0	10.8	10.5
Rio Linda	6	90.1	86.0	87.8	70.8	69.5	72.2	71.3	11.8	10.3
Sacramento	14	58.3	64.0	61.6	61.4	56.6	55.1	56.1	8.9	9.2
Valley	41	70.9	75.8	73.5	67.3	69.1	65.5	66.8	10.5	10.4
Other Sacramento Area	11	75.4	81.5	78.9	65.9	69.7	64.9	69.0	11.3	10.4
Los Angeles	5	84.5	78.0	80.7	73.0	78.3	69.5	70.4	10.8	10.4
Out of State	30	79.4	73.1	75.8	71.9	65.8	56.4	61.0	10.9	10.0
Foreign Country	13	64.7	65.8	65.3	65.2	48.1	55.3	54.7	9.2	8.8
Entire Population	498	72.6	73.3	73.0	65.7	65.2	61.2	63.2	10.6	10.0

TABLE 11 - RANK ORDERING OF LOCAL HIGH SCHOOLS BY ASSESSMENT TEST SCORES

	Total Reading Scores			Total English Scores	
1.	Other Sacramento High Schools	(78.9)	1.	Elk Grove	(69.6)
2.	Elk Grove	(78.4)	2.	Other Sacramento High Schools	(69.0)
3.	McClatchy	(77.3)	3.	Valley	(66.8)
4.	Kennedy	(76.1)	4.	McClatchy	(66.0)
5.	Cordova	(74.6)	5.	Cordova	(65.8)
6.	Valley	(73.5)	6.	Kennedy	(65.6)
7.	Johnson	(67.7)	7.	Johnson	(59.4)
8.	Burbank	(64.1)	8.	Burbank	(57.3)
9.	Sacramento	(61.6)	9.	Sacramento	(56.1)

CONCLUSIONS

1. The demographic pattern of the sample indicates appropriate testing of all subgroups except for evening students. Because the evening student population is a major portion of the total student body, effort should be made to get more definitive data on the needs and aspirations of this population.

2. The pattern of differences in mean test scores for various subgroups could be an indication of needs for services. The differences in spelling and grammar of males and females follow the national trends of females scoring higher in English skills. Males may benefit from the extra help available in college courses and other activities designed to improve grammar, spelling, and reference skills. The differences in test scores by ethnic groups should be cause for concern. The Asian and Filipino differences may be attributed to ESL language complications. The scores made by this group may indicate a need for ESL courses before taking college level course work. Black students, however, are coming from the high schools seemingly ill equipped to successfully complete college level courses. Although remedial course work at the community college level can supply part of resources, further preparatory work may be required at a precollege level. The inferences which could be made from the data are too numerous and complex to discuss in this paper.

3. The patterns for older, longer removed from high school students indicates some deterioration especially in English skills. Re-entry support services could be of great value to these students. Of special importance would be the tutorial and remedial programs to "brush them up" to the college level.

4. Support needs to be directed at the non-transfer students who are scoring substantially lower in basic skill areas. The need for solid competence in reading and English is present in all vocational course areas. Programs such as the "PREP" program at CRC which offer special remedial support courses can be of great value for the non-transfer vocational students.

5. The Regression Analyses provide some indication that assessment test scores can be used as predictors for successful performance in college. Although the time span was too short for meaningful follow-up (only 2 students had graduated), grammar conventions and reference skills provide significant predictive ability for overall grade point average. English skills in general appear critical to successful completion of college level course work.

RECOMMENDATIONS FOR FURTHER RESEARCH

Long term follow up using assessment scores as predictors of success in college will provide a more definitive picture of the predictive power of assessment testing. Continued following of the performance of feeder high schools will give a clearer picture of the strengths and weaknesses of students entering CRC. A further assessment of the needs of specific ethnic minorities seems appropriate if the college is to be prepared to meet these demands.

This research has demonstrated the value of using the vast amount of data and information collected by the assessment center as a means for planning and meeting the needs of the CRC student population. Continued research activities will expand on some of the information developed in this initial study of the assessment process and procedures at Cosumnes River College.

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